

State of California
Air Resources Board

Short-Lived Climate Pollutant Reduction Strategy

Resolution 17-9

March 23, 2017

Agenda Item No: 17-3-5

WHEREAS, the Legislature enacted the California Global Warming Solutions Act of 2006 (AB 32, Statutes of 2006, Chapter 488; Health and Safety Code section 38500 et seq.), which declares global warming poses a serious threat to the economic well-being, public health, natural resources, and environment of California;

WHEREAS, AB 32 charges the Air Resources Board (ARB or the Board) with monitoring and regulating sources of emissions of greenhouse gases (GHGs) that cause global warming in order to reduce emissions of GHGs (Health and Safety Code section 38510);

WHEREAS, AB 32 directs ARB to create a comprehensive multi-year program to reduce California's GHG emissions to no greater than 1990 levels by 2020, and to maintain and continue reductions in emissions of GHGs beyond 2020;

WHEREAS, the Legislature enacted Senate Bill 32 (SB 32, Chapter 249, Statutes of 2016; Health and Safety Code section 38566) requiring ARB to ensure that California's statewide GHG emissions are reduced to at least 40 percent below 1990 levels no later than December 31, 2030;

WHEREAS, the 2014 Update to the Climate Change Scoping Plan (*First Update to the Climate Change Scoping Plan*) developed pursuant to Health and Safety Code section 38561 (h), identified Short-Lived Climate Pollutants (SLCPs) as an important aspect of a comprehensive approach to addressing climate change;

WHEREAS, SLCPs, including black carbon, methane, and fluorinated gases, including hydrofluorocarbons (HFCs), have greater ability to trap heat compared to carbon dioxide and reducing their emissions could provide immediate air quality and public health benefits as well as help the State meet the GHG emission reduction requirements in Health and Safety Code section 38566;

WHEREAS, the Legislature enacted Senate Bill 605 (SB 605, Chapter 523, Statutes of 2014; Health and Safety Code section 39730) requiring ARB to develop a strategy to reduce emissions of SLCPs in the state in coordination with other state agencies and air

districts and to complete an inventory of sources and emissions of SLCPs in the state based on available data;

WHEREAS, the Legislature enacted Senate Bill 1383 (SB 1383, Chapter 395, Statutes of 2016; Health and Safety Code section 39730.5 et seq.) requiring emissions of methane and HFCs in the state to be reduced to 40 percent below 2013 levels by 2030 and anthropogenic black carbon emissions to be reduced 50 percent below 2013 levels by 2030, and requiring ARB to approve and begin implementing the strategy developed pursuant to Health and Safety Code section 39730 by January 1, 2018;

WHEREAS, in May 2015, ARB staff prepared and circulated for public review a *Short-Lived Climate Pollutant Concept Paper (Concept Paper)* outlining concepts for developing a SLCP strategy pursuant to Health and Safety Code section 39730, and held a public workshop in Sacramento to discuss the *Concept Paper*;

WHEREAS, in September 2015, ARB staff prepared, in consultation with state agencies and the local air districts, and circulated for public review, a *Draft Short-Lived Climate Pollutant Reduction Strategy (Draft SLCP Strategy)*, and held subsequent public workshops in Sacramento, Fresno, and Diamond Bar to discuss the Draft SLCP Strategy;

WHEREAS in April 2016, ARB staff prepared, in consultation with state agencies and the local air districts, and circulated for public review, a *Proposed Short-Lived Climate Pollutant Reduction Strategy (Proposed SLCP Strategy)*, held subsequent public workshops in Sacramento and Bakersfield to discuss the Proposed SLCP Strategy, and provided an informational update to the Board on the Proposed SLCP Strategy at the May 19, 2016, Board meeting;

WHEREAS, in November 2016, after considering public comments received on the Proposed SLCP Strategy as well as new requirements for the SLCP Strategy contained in SB 1383, ARB staff prepared, in consultation with state agencies and the local air districts, and circulated for public review, a *Revised Proposed Short-Lived Reduction Strategy (Revised Proposed SLCP Strategy)*, and held public workshops in Sacramento, Diamond Bar, and Fresno to discuss the Revised Proposed SLCP Strategy;

WHEREAS, on March 13, 2017, after considering public comments received on the Revised Proposed SLCP Strategy, ARB staff prepared and posted the final proposed *Short-Lived Climate Pollutant Reduction Strategy (final SLCP Strategy)*;

WHEREAS, the Environmental Justice Advisory Committee convened pursuant to AB 32, Health and Safety Code section 38591 is advising ARB on the development of the second update to the Climate Change Scoping Plan (*2030 Target Scoping Plan Update*);

WHEREAS, since the SLCP Strategy, if approved by the Board, will inform the *2017 Climate Change Scoping Plan Update*, ARB staff considered advice and input from the Environmental Justice Advisory Committee in preparing the SLCP Strategy, as well as experts in the field of climate change;

WHEREAS, ARB staff coordinated extensively with agencies throughout California government, as well as consulting with air districts, stakeholders, academic experts in relevant topics, representatives and expert analysts associated with affected industries, non-governmental organizations, representatives and expert analysts associated with affected communities, and many other members of the public;

WHEREAS, ARB developed and posted on its website a statewide emission inventory for methane, HFCs, and black carbon pursuant to Health and Safety Code section 39730;

WHEREAS, the final proposed SLCP Strategy finds that SLCPs have atmospheric lifetimes on the order of a few days to a few decades, and their relative climate forcing impacts, when measured in terms of how they heat the atmosphere, can be tens, hundreds, or even thousands of times greater than that of CO₂;

WHEREAS, the final proposed SLCP Strategy finds that reducing emissions of SLCPs can improve air quality and reduce related health risks, especially in disadvantaged communities, reduce damage to forests and crops, reduce background ozone and particulate levels to help meet federal air quality standards, and reduce disruption of historic rainfall patterns;

WHEREAS, the final proposed SLCP Strategy finds that wildfire is the largest source of black carbon emissions in California, harmfully impacting both public health and the climate;

WHEREAS, in general, wildfires are occurring at increasing rates and at increasing levels of severity, that these wildfires put California's forest in jeopardy and raise concern over the long-term resilience of these forests and their ability to sequester carbon, mitigate climate change and provide resource amenities;

WHEREAS, many studies have demonstrated net benefits for fuel treatments and forest management activities designed to reduce both fire spread and fire severity at the experimental unit or stand level, both in modeled and real world scenarios, and fuel treatments are key elements of strategies to restore forest and the natural role of fire at the local, state and national levels;

WHEREAS, natural and working lands are a key sector in the State's climate change strategy because storing carbon in trees, other vegetation, soils and aquatic sediment can effectively remove carbon dioxide from the atmosphere, and the proposed 2030 Target Scoping Plan recognizes the importance of reducing greenhouse gas and black carbon emissions from wildfire;

WHEREAS, the California Natural Resources Agency, the California Environmental Protection Agency, and the California Department of Forestry and Fire Protection are currently developing a Forest Carbon Plan that will be the detailed implementation plan for the forest carbon goals embodied in the proposed 2017 Climate Change Scoping

Plan Update, and the Forest Carbon Plan seeks to firmly establish California's forests as a more resilient and reliable long-term carbon sink, rather than a GHG and black carbon emission source;

WHEREAS, the Forest Carbon Plan and the proposed 2017 Climate Change Scoping Plan Update will continue to explore the interrelation of climate change and natural lands and lay out programmatic, and scientific actions needed to increase carbon sequestration and decrease black carbon emissions from wildfire;

WHEREAS, the final proposed SLCP Strategy identifies statewide 2030 emission reduction targets for anthropogenic black carbon, methane, and HFCs, consistent with Health and Safety Code section 39730.5, and equivalent emission reductions in MMTCO₂e using 20 year global warming potentials from the IPCC's Fourth Assessment Report for methane and HFCs and the Fifth Assessment Report for black carbon;

WHEREAS, the final proposed SLCP Strategy includes recommendations to reduce landfill methane emissions by reducing the level of statewide disposal of organics to landfills, pursuant to Health and Safety Code section 39730.6;

WHEREAS, recommended measures have been prioritized, where possible, to offer cobenefits, including via improving water quality or reducing other air pollutants that impact community health and benefit disadvantaged communities;

WHEREAS, the final proposed SLCP Strategy includes recommendations to reduce dairy and livestock sector methane emissions, pursuant to Health and Safety Code section 39730.7;

WHEREAS, the final proposed SLCP Strategy makes recommendations on the creation of new policies, and expanding and refining existing policies, in other major economic sectors that contribute to methane, anthropogenic black carbon, and HFCs in the State, to achieve reductions in SLCP emissions consistent with Health and Safety Code section 39730.5;

WHEREAS, ARB's regulatory program that involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans has been certified by the Secretary of Natural Resources Agency under Public Resources Code section 21080.5 of the California Environmental Quality Act (CEQA; California Code of Regulations, title 14, section 15251(d)), and ARB conducts its CEQA review according to this certified program (California Code of Regulations, title 17, sections 60000-60007);

WHEREAS, ARB prepared a draft environmental analysis under its certified regulatory program for the SLCP Strategy entitled *Draft Environmental Analysis Prepared for the Proposed Short-Lived Climate Pollutant Reduction Plan* (Draft EA), and circulated it as Appendix E to the SLCP Strategy for 45 days from April 11, 2016, through May 26, 2016;

WHEREAS, after considering public comments and revisions to the SLCP Strategy based on the requirements of SB 1383, ARB staff prepared a *Revised Draft Environmental Analysis Prepared for the Revised Proposed Short-Lived Climate Pollutant Reduction Plan* (Revised Draft EA), which was recirculated for a 45-day public comment period from November 28, 2016, through January 17, 2017;

WHEREAS, the Revised Draft EA concluded implementation of the SLCP Strategy has the potential to result in: beneficial impacts to air quality and greenhouse gas emissions; less than significant impacts, or no impacts, to aesthetics, agriculture and forest resources, air quality, biological resources, cultural resources, energy demand, geology and soils, greenhouse gases (short-term), hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreational services, transportations and traffic and utilities and service systems; and potentially significant impacts to aesthetics, agriculture and forest resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, transportation/traffic, and utilities and service systems;

WHEREAS, staff reviewed written comments received on the Revised Draft EA and prepared the *Final Revised Draft Environmental Analysis Prepared for the Revised Proposed Short-Lived Climate Pollutant Reduction Strategy* (Final EA) and prepared written responses to those comments in a document entitled *Responses to Comments on the Revised Draft Environmental Analysis Prepared for the Revised Proposed Short-Lived Climate Pollutant Reduction Strategy* (Response to EA Comments);

WHEREAS, on March 13, 2017, staff posted on ARB's webpage the Final EA, which includes minor revisions to the Revised Draft EA, and the Response to EA Comments;

WHEREAS, prior to the duly noticed public hearing held on March 23, 2017, staff provided the Final EA, the Response to EA Comments, and the final version of the proposed *Short-Lived Climate Pollutant Reduction Strategy* to the Board for consideration;

WHEREAS, implementation of the strategy will proceed through further, extensive, public processes, guided, as relevant, by the considerations and requirements expressed in SB 605, SB 1383, SB 32, AB 32, CEQA, and other governing law, and consistent with the principles and commitments expressed in the final SLCP Strategy;

WHEREAS, in consideration of the final SLCP Strategy, written and oral testimony presented by the public, industry, and government agencies, the Board finds that:

The final proposed SLCP Strategy was prepared via a collaborative public process that extensively engaged members of the public, affected industries, scientific experts, local and regional governments, state agencies, and other stakeholders, consistent with the consultation and engagement requirements of SB 1383 and SB 605;

The final proposed SLCP Strategy provides an inventory of sources and emissions of SLCPs in California based on available data, identifies research needs and data gaps, identifies existing and potential new control measures, and prioritizes the development of new measures that offer cobenefits, including cobenefits to disadvantaged communities, consistent with SB 605, and meets all other relevant requirements of SB 605;

The final proposed SLCP Strategy evaluates the best-available scientific, technological, and economic information to ensure that the strategy is cost-effective and feasible, and incorporates, as appropriate, prioritizes measures and actions that provide cobenefits including job growth, local economic benefits, public health benefits, and potential for new innovation in technology, energy, and resource management practices, consistent with SB 1383 and meets all other relevant requirements of SB 1383;

The final proposed SLCP Strategy provides the framework needed to carry out the additional regulatory, research, and incentive-based activities called for by SB 1383 and other controlling law;

The final proposed SLCP Strategy further enhances California's leadership on climate and energy issues, and demonstrates that subnational jurisdictions can take important action on SLCP control, serving as a model to other jurisdictions;

The final proposed SLCP Strategy demonstrates ARB's continued commitment to collaborative work to achieve these goals; in addition to ongoing work throughout state government and with all stakeholders, including representatives of affected industries and communities, California's local and regional governments are critical partners in meeting the 2030 SLCP GHG emission reduction goals and strong collaboration with these agencies will be necessary to achieve these goals;

Ongoing assessment and monitoring of the implementation of the SLCP Strategy is necessary, including economic impacts;

The considerations and requirements expressed in SB 605, SB 1383, SB 32, AB 32, CEQA, and other governing law, and the principles and commitments expressed in the final SLCP Strategy will, with continued public engagement and collaboration, guide implementation of the actions recommended in the SLCP Strategy;

Periodic reports to the Board on the implementation of the SLCP Strategy will inform the public on whether adjustments are needed to the proposed measures to meet the 2030 GHG emission reduction targets required by SB 32 and SB 1383.

NOW, THEREFORE, BE IT RESOLVED that the Board certifies that the Final EA, as set forth in Attachment B to this resolution, was completed in compliance with ARB's certified regulatory program to meet the requirements of CEQA, reflects the agency's independent judgment and analysis, and was presented to the Board, whose members reviewed and considered the information before taking action to approve the final SLCP Strategy.

BE IT FURTHER RESOLVED that the Board approves the Responses to EA Comments as set forth in Attachment C to this resolution.

BE IT FURTHER RESOLVED that in consideration of the Final EA and the Responses to EA Comments, the Board adopts the Findings and Statement of Overriding Considerations as set forth in Attachment D to this resolution.

BE IT FURTHER RESOLVED that the Board approves the final proposed *Short-Lived Climate Pollutant Reduction Strategy*, as set forth in Attachment A to this resolution.

BE IT FURTHER RESOLVED that the Board directs staff to report to the Board periodically on the status of implementation of the SLCP Strategy.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to transmit the Notice of Decision along with the Response to EA Comments to the Secretary of the Natural Resources Agency for posting.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to continue to work with the California Department of Resources Recycling and Recovery on the development and implementation of regulations and other programs to meet the organic waste disposal targets in SB 1383.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with the California Environmental Protection Agency, the California Natural Resources Agency, and the California Department of Forestry and Fire Protection to complete the Forest Carbon Plan and to work with those agencies and the Research Climate Action Team to identify and fund research to refine radiative forcing estimates from emissions from wildfires, and how forest management strategies affect fire behavior, emission profiles and climate change.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to continue to work with stakeholders, including dairy operators, project developers, community groups, and environmental justice groups, to identify and address technical, market, regulatory, environmental, and other challenges to the development of dairy methane emission reduction projects.

I hereby certify that the above is a true and correct copy of Resolution 17-9 as adopted by the Air Resources Board.



Rana McReynolds, Clerk of the Board

Resolution 17-9

March 23, 2017

Identification of Attachments to Board Resolution 17-9

- Attachment A:** *Short-Lived Climate Pollutant Reduction Strategy*, released to the public on March 13, 2017.
- Attachment B:** *Final Environmental Analysis Prepared for the Short-Lived Climate Pollutant Reduction Strategy*, released to the public on March 13, 2017.
- Attachment C:** *Responses to Comments on the Revised Draft Environmental Analysis for the Short-Lived Climate Pollutant Reduction Strategy* released to the public on March 13, 2017.
- Attachment D:** Findings and Statement of Overriding Considerations.
(Distributed at the March 23, 2017 Board Meeting)